

## Background: Palm oil and indirect land use change

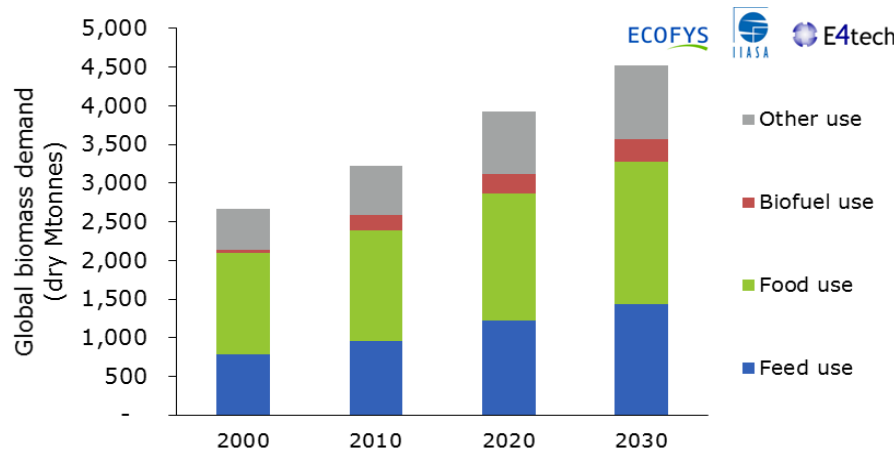
### Palm oil in biofuels

- Palm oil is one of the **cheapest vegetable oils** available in Europe and as such has also found its way into biodiesel production, with the biofuels sector becoming one of the biggest users of palm oil.
- At the same time, oil crops, especially palm oil, carry the **highest risk of indirect land use change** (ILUC, see below) given the high global demand for vegetable oils. This means that even if the palm oil as such is produced sustainably, diverting the palm oil to the transport sector can mean that more oil crops need to be produced elsewhere, with a risk of this leading to deforestation and the drainage of peatlands. This seriously affects the greenhouse gas savings these biofuels can deliver – to the extent that many ILUC modelling studies including assessments for the European Commission indicate that oil crop biofuels cause higher greenhouse emissions than fossil fuels.
- EU policies have therefore sought to address the risks stemming from crop-based biofuels, in particular the oil crops, without necessarily singling out palm oil so far. The EU's ILUC Directive, for example, introduced a **cap on the contribution of crop-based biofuels** at 7% and included sustainability criteria as well as so-called ILUC factors for reporting purposes.
- In the **UK**, we have been actively promoting a **transition from crop-based to waste-based biofuels**, for example through **double rewards** awarded to waste-based biofuels. This means that those fuels double-count towards the suppliers' obligations and producers can receive double the reward, making less sustainable but potentially cheaper biofuels less attractive. As a result of this policy, about two thirds of biofuels supported under the UK Renewable Transport Fuel obligation are waste-based. Crop-based biodiesel is negligible in the UK (the main crop-based biofuel in the UK is bioethanol, which is blended with petrol rather than diesel). Palm oil-based biodiesel has not been used in the UK for a number of years – though appropriately certified palm oil is eligible to receive the same credits as other crop biofuels under the UK scheme. Furthermore, the Government decided to set a **sliding crop cap**, decreasing from 4% in 2020 to 2% in 2032.
- For the reasons above, an increase of palm oil in the UK biofuels mix is therefore neither considered desirable nor expected. At the same time, rather than the ban on palm oil the European Parliament suggested, it would be preferable from a policy perspective to introduce measures that seek to minimise the contribution of all high ILUC risk biofuels rather than singling out one feedstock. This would be to ensure we promote the most sustainable biofuels with the highest greenhouse gas savings (and avoid those understood to cause an increase in emissions). Such a measure could be more easily adapted in line with latest scientific evidence on indirect land use change effects and would more likely be compatible with WTO rules.

### Indirect Land Use change (ILUC)

- Indirect land use change (ILUC) occurs where production of biofuel from crops

grown on existing agricultural land results in the **displacement of production on to previously uncultivated land**. This is because the demand for the food and feed crops remains, and is globally expected to rise (see graph below).



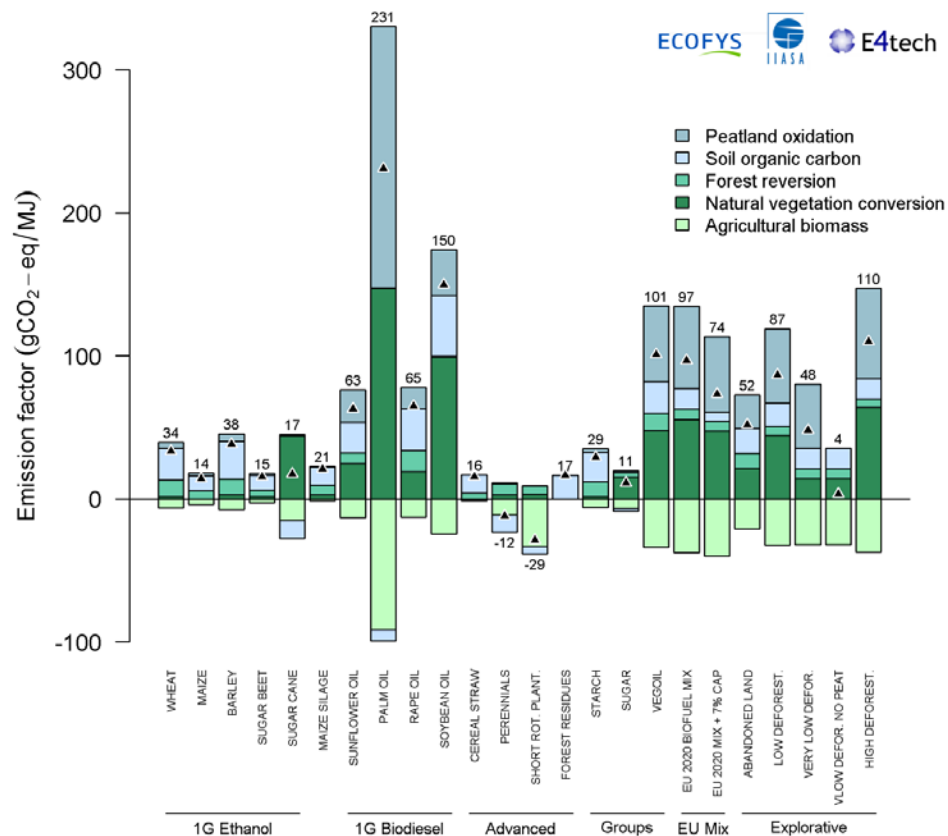
Source: GLOBIOM report (2016), see [https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report\\_GLOBIOM\\_publication.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report_GLOBIOM_publication.pdf)

- Consequently, when biofuels are produced on existing agricultural land, this can lead to **someone else producing more food and feed crops** somewhere else. This can include **land use change** such as **deforestation**. Even sustainable production in the UK can therefore lead to a loss of rain forest in Indonesia and Brazil. This has to be factored in when calculating the greenhouse gas emission savings from biofuels.



Source: UFOP, see <http://www.ufop.de/iluc-english/iluc-hypothesis/>

- When the emissions from these indirect impacts are taken into account, some (but not all) crop-based biofuel **can actually lead to higher emissions** than fossil fuel. Oil crops (including palm oil or soy) carry the highest risk of indirect land use change impacts.



Source: GLOBIOM report (2016), see [https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report\\_GLOBIOM\\_publication.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report_GLOBIOM_publication.pdf)